

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior version and listing of claims in the application.

Claims 1-4 (Canceled).

Claim 5 (Currently Amended) A tuned mass damper, comprising:
a mass having predetermined inertia properties; and
a plurality of isolators arranged in a hexapod configuration, each isolator having at least a first end and a second end, each isolator first end coupled to the mass and each isolator second end adapted to couple to a structure that may experience vibrations at particular frequencies and at particular locations on the structure in six independent degrees of freedom,
wherein each of the isolators, in combination with the mass, is configured to be tuned independent of the other isolators to reduce a first particular frequency of the vibrations experienced by the structure at a first particular location on the structure.

Claim 6 (Canceled).

Claim 7 (Previously Presented) The damper of Claim 5, wherein each of the isolators, in combination with the mass, is configured to be tuned such that tuning a combination of two or more isolators reduces a second particular frequency.

Claim 8 (Previously Presented) The damper of Claim 5, wherein:
each isolator comprises a spring having an adjustable spring constant;
each isolator second end is adapted to couple to the structure at a predetermined location thereon; and
each isolator is individually tuned by adjusting its spring constant and the predetermined location on the structure to which its second end will couple.

Claim 9 (Previously Presented) The damper of Claim 5, wherein each isolator comprises:
a tubular damping strut coupled between the isolator first and second ends;

a first spherical pivot coupled to the isolator first end; and
a second spherical pivot coupled to the isolator second end.

Claim 10 (Currently Amended) In a system including at least a structure that experiences vibrations at particular frequencies in six degrees of freedom and at particular locations on the structure, a tuned mass damper comprising:

a mass having predetermined inertia properties; and

a plurality of isolators arranged in a hexapod configuration, each isolator having at least a first end and a second end, each isolator first end coupled to the mass and each isolator second end coupled to the structure,

wherein each of the isolators, in combination with the mass, is configured to be tuned independent of the other isolators to reduce a first particular frequency of the vibrations experienced by the structure at a first particular location on the structure.

Claim 11 (Canceled).

Claim 12 (Currently Amended) The damper of Claim 10, wherein each of the isolators, in combination with the mass, is configured to be tuned such that tuning a combination of two or more isolators reduces a second particular frequency.

Claim 13 (Previously Presented) The damper of Claim 10, wherein:

each isolator comprises a spring having an adjustable spring constant;

each isolator second end is adapted to couple to the structure at a predetermined location thereon; and

each isolator is individually tuned by adjusting its spring constant and the predetermined location on the structure to which its second end will couple.

Claim 14 (Previously Presented) The damper of Claim 10, wherein each isolator comprises:

a tubular damping strut coupled between the isolator first and second ends;

a first spherical pivot coupled to the isolator first end; and

a second spherical pivot coupled to the isolator second end.